(3) All 911 calls must be routed through the use of ANI and, if necessary, pseudo-ANI, via the dedicated Wireline E911 Network; and

(4) The Registered Location must be available to the appropriate PSAP, designated statewide default answering point, or appropriate local emergency authority from or through the appropriate automatic location information (ALI) database.

(c) *Service Level Obligation.* Notwithstanding the provisions in paragraph (b) of this section, if a PSAP, designated statewide default answering point, or appropriate local emergency authority is not capable of receiving and processing either ANI or location information, an interconnected VoIP service provider need not provide such ANI or location information; however, nothing in this paragraph affects the obligation under paragraph (b) of this section of an interconnected VoIP service provider to transmit via the Wireline E911 Network all 911 calls to the PSAP, designated statewide default answering point, or appropriate local emergency authority that serves the caller's Registered Location and that has been designated for telecommunications carriers pursuant to §64.3001 of this chapter.

(d) *Registered Location Requirement.* As of November 28, 2005, interconnected VoIP service providers must:

(1) Obtain from each customer, prior to the initiation of service, the physical location at which the service will first be utilized; and

(2) Provide their end users one or more methods of updating their Registered Location, including at least one option that requires use only of the CPE necessary to access the interconnected VoIP service. Any method utilized must allow an end user to update the Registered Location at will and in a timely manner.

(e) *Customer Notification.* Each interconnected VoIP service provider shall:

(1) Specifically advise every subscriber, both new and existing, prominently and in plain language, of the circumstances under which E911 service may not be available through the interconnected VoIP service or may be in some way limited by comparison to traditional E911 service. Such circumstances include, but are not limited to, relocation of the end user's IP-compatible CPE, use by the end user of a non-native telephone number, broadband connection failure, loss of electrical power, and delays that may occur in making a Registered Location available in or through the ALI database;

(2) Obtain and keep a record of affirmative acknowledgement by every subscriber, both new and existing, of having received and understood the advisory described in paragraph (e)(1) of this section; and

(3) Distribute to its existing subscribers warning stickers or other appropriate labels warning subscribers if E911 service may be limited or not available and instructing the subscriber to place them on or near the equipment used in conjunction with the interconnected VoIP service. Each interconnected VoIP provider shall distribute such warning stickers or other appropriate labels to each new subscriber prior to the initiation of that subscriber's service.

(f) *Compliance Letter.* All interconnected VoIP providers must submit a letter to the Commission detailing their compliance with this section no later than November 28, 2005.

PART 11—EMERGENCY ALERT SYSTEM (EAS)

Subpart A—General

Sec.

Subpart B—Equipment Requirements

AUTHORITY: 47 U.S.C. 151, 154 (i) and (o), 303(r), 544(g) and 606.

SOURCE: 59 FR 67092, Dec. 28, 1994, unless otherwise noted.

Subpart A—General

§ 11.1 Purpose.

This part contains rules and regulations providing for an Emergency Alert System (EAS). The EAS provides the President with the capability to provide immediate communications and information to the general public at the National, State and Local Area levels during periods of national emergency. The rules in this part describe the required technical standards and operational procedures of the EAS for analog AM, FM, and TV broadcast stations, digital broadcast stations, analog cable systems, digital cable systems, wireless cable systems, Direct Broadcast Satellite (DBS) services, Satellite Digital Audio Radio Service (SDARS), and other participating entities. The EAS may be used to provide the heads of State and local government, or their designated representatives, with a means of emergency communication with the public in their State or Local Area.

[70 FR 71031, Nov. 25, 2005]

§ 11.11 The Emergency Alert System (EAS).

(a) The EAS is composed of analog radio broadcast stations including AM, FM, and Low-power FM (LPFM) stations; digital audio broadcasting (DAB) stations, including digital AM, FM, and Low-power FM stations; analog television broadcast stations including Class A television (CA) and Low-power TV (LPTV) stations; digital television (DTV) broadcast stations, including digital CA and digital LPTV stations; analog cable systems; digital cable systems which are defined for purposes of this part only as the portion of a cable system that delivers channels in digital format to subscribers at the input of a Unidirectional Digital Cable Product or other navigation device; wireless cable systems which may consist of Broadband Radio Service (BRS), or Educational Broadband Service (EBS) stations; DBS services, as defined in 47 CFR 25.701(a) (including certain Ku-band Fixed-Satellite Service Direct to Home providers); SDARS, as defined in 47 CFR 25.201; participating broadcast networks, cable networks and program suppliers; and other entities and industries operating on an organized basis during emergencies at the National, State and local levels. These entities are referred to collectively as EAS Participants in this part, and are subject to this part, except as otherwise provided herein. These rules in this part are effective on December 31, 2006 for DTV, DAB, digital cable and SDARS providers, and on May 31, 2007 for DBS providers. At a minimum EAS Participants must use a common EAS protocol, as defined in §11.31, to send and receive emergency alerts in accordance with the effective dates listed above in this paragraph and in the following tables:

ANALOG AND DIGITAL BROADCAST STATIONS

EAS equipment requirement	AM & FM	Digital	TV AM & FM	DTV	FM Class D [1]	LPTV [2]	LPFM [3]	Class A TV [4]
Two-tone encoder [5 6]	Y	Y 12/31/06	Y	Y 12/31/06	N	N	N	
EAS decoder	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 1/1/97	Y	Y
EAS encoder	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	N	N	N	
Audio message	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 12/31/06	Y 1/1/97	Y 1/1/97	Y	Y
Video message	N/A	N/A	Y 1/1/97	Y 12/31/06	N/A	Y 1/1/97	N/A	

[1] Effective December 31, 2006, digital FM Class D stations have the same requirements.

[2] LPTV stations that operate as television broadcast translator stations are exempt from the requirement to have EAS equipment. Effective December 31, 2006, digital LPTV stations have the same requirements.

[3] LPFM stations must install a decoder within one year after the FCC publishes in the FEDERAL REGISTER a public notice indicating that at least one decoder has been certified by the FCC. Effective December 31, 2006, digital LPFM stations have the same requirements.

[4] Effective December 31, 2006, digital Class A TV stations have the same requirements.

[5] Effective July 1, 1995, the two-tone signal must be 8–25 seconds.

[6] Effective January 1, 1998, the two-tone signal may only be used to provide audio alerts to audiences before EAS emergency messages and the required monthly tests.

ANALOG CABLE SYSTEMS

[A. Analog cable systems serving fewer than 5,000 subscribers from a headend must either provide the National level EAS message on all programmed channels—including the required testing—by October 1, 2002, or comply with the following EAS requirements. All other analog cable systems must comply with B.]

	System size and effective dates		
B. EAS equipment requirement	>=10,000 subscribers	>=5,000 but <10,000 subscribers	<5,000 subscribers
Two-tone signal from storage device	Y 12/31/98	Y 10/1/02	Y 10/1/02
EAS decoder[3]	Y 12/31/98	Y 10/1/02	Y 10/1/02
EAS encoder[2]	Y 12/31/98	Y 10/1/02	Y 10/1/02
Audio and Video EAS Message on all channels	Y 12/31/98	Y 10/1/02	N
Video interrupt and audio alert message on all channels,[3] Audio and Video EAS message on at least one channel.	N	N	Y 10/1/02

[1] Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8–25 seconds in duration.

[2] Analog cable systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

[3] The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.

Note: Programmed channels do not include channels used for the transmission of data such as interactive games.

WIRELESS CABLE SYSTEMS (BRS/EBS STATIONS)

[A. Wireless cable systems serving fewer than 5,000 subscribers from a single transmission site must either provide the National level EAS message on all programmed channels including the required testing by October 1, 2002, or comply with the following EAS requirements. All other wireless cable systems must comply with B.]

	System size and effective dates	
B. EAS equipment requirement subscribers	>=5,000 subscribers	<5,000
EAS decoder	Y 10/1/02	Y 10/1/02
EAS encoder[1 2]	Y 10/1/02	Y 10/1/02
Audio and Video EAS Message on all channels[3]	Y 10/1/02	N
Video interrupt and audio alert message on all channels;[4] Audio and Video EAS message on at least one channel.	N	Y 10/1/02

[1] The two-tone signal is used only to provide an audio alert to an audience prior to an EAS emergency message or to the Required Monthly Test (RMT) under § 11.61(a)(1). The two-tone signal must be 8–25 seconds in duration.

[2] Wireless cable systems serving < 5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

[3] All wireless cable systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages.

[4] The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.

Note: Programmed channels do not include channels used for the transmission of data services such as Internet.

DIGITAL CABLE SYSTEMS

[A. Digital cable systems serving fewer than 5,000 subscribers from a headend must either provide the National level EAS message on all programmed channels including the required testing by December 31, 2006, or comply with the following EAS requirements. All other digital cable systems must comply with B.]

	System size and effective dates	
B. EAS equipment requirement	>=5,000 subscribers	<5,000 subscribers
Two-tone signal from storage device[1]	Y 12/31/06	Y 12/31/06
EAS decoder[3]	Y 12/31/06	Y 12/31/06
EAS encoder[2]	Y 12/31/06	Y 12/31/06
Audio and Video EAS Message on all channels[4]	Y 12/31/06	N
Video interrupt and audio alert message on all channels,[3] Audio and Video EAS message on at least one channel.	N	Y 12/31/06

[1] Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8–25 seconds in duration.

[2] Digital cable systems serving <5,000 subscribers are permitted to operate without an EAS encoder if they install an FCC-certified decoder.

[3] The Video interrupt must cause all channels that carry programming to flash for the duration of the EAS emergency message. The audio alert must give the channel where the EAS messages are carried and be repeated for the duration of the EAS message.

[4] All digital cable systems may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages.

Note: Programmed channels do not include channels used for the transmission of data such as interactive games or the transmission of data services such as Internet.

SDARS AND DBS

EAS equipment requirement	SDARS	DBS
Two-tone signal [1]	Y 12/31/06	Y 5/31/07
EAS decoder	Y 12/31/06	Y 5/31/07
EAS encoder	Y 12/31/06	Y 5/31/07
Audio message on all channels [2]	Y 12/31/06	Y 5/31/07
Video message on all channels [2]	N/A	Y 5/31/07

[1] Two-tone signal is only used to provide an audio alert to audience before EAS emergency messages and required monthly test. The two-tone signal must be 8–25 seconds in duration.

[2] All SDARS and DBS providers may comply with this requirement by providing a means to switch all programmed channels to a predesignated channel that carries the required audio and video EAS messages or by any other method that ensures that viewers of all channels receive the EAS message.

(b) Analog class D non-commercial educational FM stations as defined in §73.506 of this chapter, digital class D non-commercial educational FM stations, analog LPFM stations as defined in §§73.811 and 73.853 of this chapter, digital LPFM stations, analog LPTV stations as defined in §74.701(f), and digital LPTV stations as defined in §74.701(k) of this chapter are not required to comply with §11.32. Analog and digital LPTV stations that operate as television broadcast translator stations, as defined in §74.701(b) of this chapter, are not required to comply with the requirements of this part. FM broadcast booster stations as defined in §74.1201(f) of this chapter and FM translator stations as defined in §74.1201(a) of this chapter which entirely rebroadcast the programming of other local FM broadcast stations are not required to comply with the requirements of this part. International broadcast stations as defined in §73.701 of this chapter are not required to comply with the requirements of this part. Analog and digital broadcast stations that operate as satellites or repeaters of a hub station (or common studio or control point if there is no hub station) and rebroadcast 100 percent of the programming of the hub station (or common studio or control point) may satisfy the requirements of this part through the use of a single set of EAS equipment at the hub station (or common studio or control point) which complies with §§11.32 and 11.33.

(c) For purposes of the EAS, Broadband Radio Service (BRS) and Educational Broadband Service (EBS) stations operated as part of wireless cable systems in accordance with subpart M of part 27 of this chapter are defined as follows:

(1) A ''wireless cable system'' is a collection of channels in the BRS or EBS used to provide video programming services to subscribers. The channels may be licensed to or leased by the wireless cable system operator.

(2) A ''wireless cable operator'' is the entity that has acquired the right to use the channels of a wireless cable system for transmission of programming to subscribers.

(d) Local franchise authorities and cable television system operators may enter into mutual agreements that require the installation of EAS equipment before the required dates listed in the tables in paragraph (a). Additionally, local franchise authorities may use any EAS codes authorized by the FCC in any agreements.

(e) Organizations using other communications systems or technologies such as low earth orbit satellite systems, paging, computer networks, etc. may join the EAS on a voluntary basis by contacting the FCC. Organizations that choose to voluntarily participate must comply with the requirements of this part.

[63 FR 29662, June 1, 1998, as amended at 65 FR 7639, Feb. 15, 2000; 65 FR 21657, Apr. 24, 2000; 65 FR 30001, May 10, 2000; 65 FR 34406, May 30, 2000; 67 FR 18506, Apr. 16, 2002; 69 FR 72031, Dec. 10, 2004; 70 FR 19315, Apr. 13, 2005; 70 FR 71031, Nov. 25, 2005]

§11.12 Two-tone Attention Signal encoder and decoder.

Existing two-tone Attention Signal encoder and decoder equipment type accepted for use as Emergency Broadcast System equipment under part 73 of this chapter may be used by broadcast stations until January 1, 1998, provided

that such equipment meets the requirements of §11.32(a)(9) and 11.33(b). Effective January 1, 1998, the two-tone Attention Signal decoder will no longer be required and the two-tone Attention Signal will be used to provide an audio alert.

[60 FR 55999, Nov. 6, 1995]

§11.13 Emergency Action Notification (EAN) and Emergency Action Termination (EAT).

(a) The Emergency Action Notification (EAN) is the notice to all EAS Participants and to the general public that the EAS has been activated for a national emergency.

(b) The Emergency Action Termination (EAT) is the notice to all EAS Participants and to the general public that the EAN has terminated.

[70 FR 71033, Nov. 25, 2005]

§11.14 Primary Entry Point (PEP) System.

The PEP system is a nationwide network of broadcast stations and other entities connected with government activation points. It is used to distribute the EAN, EAT and EAS national test messages, and other EAS messages.

[67 FR 18507, Apr. 16, 2002]

§11.15 EAS Operating Handbook.

The EAS Operating Handbook states in summary form the actions to be taken by personnel at EAS Participant facilities upon receipt of an EAN, an EAT, tests, or State and Local Area alerts. It is issued by the FCC and contains instructions for the above situations. A copy of the Handbook must be located at normal duty positions or EAS equipment locations when an operator is required to be on duty and be immediately available to staff responsible for authenticating messages and initiating actions.

[70 FR 71033, Nov. 25, 2005]

§11.16 National Control Point Procedures.

The National Control Point Procedures are written instructions issued by the FCC to national level EAS control points. The procedures are divided into sections as follows:

(a) *National Level EAS Activation*. This section contains the activation and termination instructions for Presidential messages.

(b) *EAS Test Transmissions*. This section contains the instructions for testing the EAS at the National level.

(c) *National Information Center (NIC)*. This section contains instructions for distributing United States Government official information messages after completion of the National Level EAS activation and termination actions.

[59 FR 67092, Dec. 28, 1994, as amended at 67 FR 18508, Apr. 16, 2002]

§11.18 EAS Designations.

(a) National Primary (NP) is a source of EAS Presidential messages.

(b) Local Primary (LP) is a source of EAS Local Area messages. An LP source is responsible for coordinating the carriage of common emergency messages from sources such as the National Weather Service or local emergency management offices as specified in its EAS Local Area Plan. If it is unable to carry out this function, other LP sources in the Local Area may be assigned the responsibility as indicated in State and Local Area Plans. LP sources are assigned numbers (LP–1, 2, 3, etc.) in the sequence they are to be monitored by other broadcast stations in the Local Area.

(c) State Primary (SP) is a source of EAS State messages. These messages can originate from the Governor or a designated representative in the State Emergency Operating Center (EOC) or State Capital. Messages are sent via the State Relay Network.

(d) State Relay (SR) is a source of EAS State messages. It is part of the State Relay Network and relays National and State common emergency messages into Local Areas.

(e) Participating National (PN) sources transmit EAS National, State or Local Area messages. The EAS transmissions of PN sources are intended for direct public reception.

(f) Non-participating National (NN) sources have elected not to participate in the National level EAS and hold an authorization letter to that effect. Upon activation of the national level

EAS, NN sources are required to broadcast the EAS codes, Attention Signal, the sign-off announcement in the EAS Operating Handbook and then stop operating. All NN sources are required to comply with §11.51, 11.52 and 11.61. They may transmit EAS State or Local Area messages at any time without prior notice.

§ 11.19 EAS Non-participating National Authorization Letter.

This authorization letter is issued by the FCC to EAS Participants that have elected not to participate in the national level EAS. It states that the EAS Participant has agreed to go off the air or discontinue programming on all channels during a national level EAS message. For licensees this authorization will remain in effect through the period of the initial license and subsequent renewals from the time of issuance unless returned by the holder or suspended, modified, or withdrawn by the Commission.

[70 FR 71033, Nov. 25, 2005]

§ 11.20 State Relay Network.

This network is composed of State Relay (SR) sources, leased common carrier communications facilities or any other available communication facilities. The network distributes State EAS messages originated by the Governor or designated official. In addition to EAS monitoring, satellites, microwave, FM subcarrier or any other communications technology may be used to distribute State emergency messages.

§ 11.21 State and Local Area Plans and FCC Mapbook.

EAS plans contain guidelines which must be followed by EAS Participants' personnel, emergency officials, and National Weather Service (NWS) personnel to activate the EAS. The plans include the EAS header codes and messages that will be transmitted by key EAS sources (NP, LP, SP and SR). State and local plans contain unique methods of EAS message distribution such as the use of the Radio Broadcast Data System (RBDS). The plans must be reviewed and approved by the Director, Office of Homeland Security, Enforcement Bureau, prior to implementation to ensure that they are consistent with national plans, FCC regulations, and EAS operation.

(a) The State plan contains procedures for State emergency management and other State officials, the NWS, and EAS Participants' personnel to transmit emergency information to the public during a State emergency using the EAS.

(b) The Local Area plan contains procedures for local officials or the NWS to transmit emergency information to the public during a local emergency using the EAS. Local plans may be a part of the State plan. A Local Area is a geographical area of contiguous communities or counties that may include more than one state.

(c) The FCC Mapbook is based on the above plans. It organizes all broadcast stations and cable systems according to their State, EAS Local Area and EAS designation.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 55999, Nov. 6, 1995; 63 FR 29663, June 1, 1998; 65 FR 21658, Apr. 24, 2000; 69 FR 30234, May 27, 2004; 71 FR 69037, Nov. 29, 2006; 70 FR 71033, Nov. 25, 2005]

Subpart B—Equipment Requirements

§ 11.31 EAS protocol.

(a) The EAS uses a four part message for an emergency activation of the EAS. The four parts are: Preamble and EAS Header Codes; audio Attention Signal; message; and, Preamble and EAS End Of Message (EOM) Codes.

(1) The Preamble and EAS Codes must use Audio Frequency Shift Keying at a rate of 520.83 bits per second to transmit the codes. Mark frequency is 2083.3 Hz and space frequency is 1562.5 Hz. Mark and space time must be 1.92 milliseconds. Characters are ASCII seven bit characters as defined in ANSI X3.4–1977 ending with an eighth null bit (either 0 or 1) to constitute a full eight-bit byte.

(2) The Attention Signal must be made up of the fundamental frequencies of 853 and 960 Hz. The two tones must be transmitted simultaneously. The Attention Signal must be transmitted after the EAS header codes.

(3) The message may be audio, video or text.

(b) The ASCII dash and plus symbols are required and may not be used for any other purpose. FM or TV call signs must use a slash ASCII character number 47 (/) in lieu of a dash.

(c) The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization. The EAS protocol and message format are specified in the following representation.

Examples are provided in FCC Public Notices.

[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)
[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(one second pause)
[PREAMBLE]ZCZC-ORG-EEE-PSSCCC+TTTT-JJJHHMM-LLLLLLLL-(at least a one second pause)
(transmission of 8 to 25 seconds of Attention Signal)
(transmission of audio, video or text messages)
(at least a one second pause)
[PREAMBLE]NNNN (one second pause)
[PREAMBLE]NNNN (one second pause)
[PREAMBLE]NNNN (at least one second pause)

[PREAMBLE] This is a consecutive string of bits (sixteen bytes of AB hexadecimal [8 bit byte 10101011]) sent to clear the system, set AGC and set asynchronous decoder clocking cycles. The preamble must be transmitted before each header and End Of Message code.

ZCZC—This is the identifier, sent as ASCII characters ZCZC to indicate the start of ASCII code.

ORG—This is the Originator code and indicates who originally initiated the activation of the EAS. These codes are specified in paragraph (d) of this section.

EEE—This is the Event code and indicates the nature of the EAS activation. The codes are specified in paragraph (e) of this section. The Event codes must be compatible with the codes used by the NWS Weather Radio Specific Area Message Encoder (WRSAME).

PSSCCC—This the Location code and indicates the geographic area affected by the EAS alert. There may be 31 Location codes in an EAS alert. The Location code uses the Federal Information Processing Standard (FIPS) numbers as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6–4. Each state is assigned an SS number as specified in paragraph (f) of this section. Each county and some cities are assigned a CCC number. A CCC number of 000 refers to an entire State or Territory. P defines county subdivisions as follows: 0 = all or an unspecified portion of a county, 1 = Northwest, 2 = North, 3 = Northeast, 4 = West, 5 = Central, 6 = East, 7 = Southwest, 8 = South, 9 = Southeast. Other numbers may be designated later for special applications. The use of county subdivisions will probably be rare and generally for oddly shaped or unusually large counties. Any subdivisions must be defined and agreed to by the local officials prior to use.

+TTTT—This indicates the valid time period of a message in 15 minute segments up to one hour and then in 30 minute segments beyond one hour; i.e., +0015, +0030, +0045, +0100, +0430 and +0600.

JJJHHMM—This is the day in Julian Calendar days (JJJ) of the year and the time in hours and minutes (HHMM) when the message was initially released by the originator using 24 hour Universal Coordinated Time (UTC).

LLLLLLLL—This is the identification of the EAS Participant, NWS office, etc., transmitting or retransmitting the message. These codes will be automatically affixed to all outgoing messages by the EAS encoder.

NNNN—This is the End of Message (EOM) code sent as a string of four ASCII N characters.

(d) The only originator codes are:

Originator	ORG code
EAS Participant	EAS
Civil authorities	CIV
National Weather Service	WXR
Primary Entry Point System	PEP

(e) The following Event (EEE) codes are presently authorized:

Nature of Activation	Event Codes
National Codes (Required):	
Emergency Action Notification (National only)	EAN
Emergency Action Termination (National only)	EAT
National Information Center	NIC
National Periodic Test	NPT
Required Monthly Test	RMT
Required Weekly Test	RWT
State and Local Codes (Optional):	
Administrative Message	ADR
Avalanche Warning	AVW[1]
Avalanche Watch	AVA[1]
Blizzard Warning	BZW
Child Abduction Emergency	CAE[1]
Civil Danger Warning	CDW[1]
Civil Emergency Message	CEM
Coastal Flood Warning	CFW[1]
Coastal Flood Watch	CFA[1]
Dust Storm Warning	DSW[1]
Earthquake Warning	EQW[1]
Evacuation Immediate	EVI
Fire Warning	FRW[1]
Flash Flood Warning	FFW
Flash Flood Watch	FFA

Nature of Activation	Event Codes
Flash Flood Statement	FFS
Flood Warning	FLW
Flood Watch	FLA
Flood Statement	FLS
Hazardous Materials Warning	HMW[1]
High Wind Warning	HWW
High Wind Watch	HWA
Hurricane Warning	HUW
Hurricane Watch	HUA
Hurricane Statement	HLS
Law Enforcement Warning	LEW[1]
Local Area Emergency	LAE[1]
Network Message Notification	NMN[1]
911 Telephone Outage Emergency	TOE[1]
Nuclear Power Plant Warning	NUW[1]
Practice/Demo Warning	DMO
Radiological Hazard Warning	RHW[1]
Severe Thunderstorm Warning	SVR
Severe Thunderstorm Watch	SVA
Severe Weather Statement	SVS
Shelter in Place Warning	SPW[1]
Special Marine Warning	SMW[1]
Special Weather Statement	SPS
Tornado Warning	TOR
Tornado Watch	TOA
Tropical Storm Warning	TRW[1]
Tropical Storm Watch	TRA[1]
Tsunami Warning	TSW
Tsunami Watch	TSA
Volcano Warning	VOW[1]
Winter Storm Warning	WSW
Winter Storm Watch	WSA

[1] Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their existing EAS equipment to add these event codes on a voluntary basis until the equipment is replaced. All models of EAS equipment manufactured after August 1, 2003 must be capable of receiving and transmitting these event codes. EAS Participants that install or replace their EAS equipment after February 1, 2004 must install equipment that is capable of receiving and transmitting these event codes.

(f) The State, Territory and Offshore (Marine Area) FIPS number codes (SS) are as follows. County FIPS numbers (CCC) are contained in the State EAS Mapbook.

	FIPS#
State:	
AL	01
AK	02
AZ	04
AR	05
CA	06
CO	08
CT	09
DE	10
DC	11
FL	12
GA	13
HI	15
ID	16
IL	17
IN	18
IA	19
KS	20
KY	21
LA	22
ME	23
MD	24
MA	25
MI	26
MN	27
MS	28
MO	29
MT	30
NE	31
NV	32
NH	33
NJ	34
NM	35
NY	36
NC	37
ND	38
OH	39
OK	40
OR	41
PA	42
RI	44
SC	45
SD	46
TN	47
TX	48
UT	49
VT	50
VA	51
WA	53
WV	54
WI	55
WY	56
Terr.:	
AS	60
FM	64
GU	66
MH	68
MH	68
PR	72
PW	70
UM	74
VI	78
Offshore (Marine Areas)[1]:	
Eastern North Pacific Ocean, and along U.S. West Coast from Canadian border to Mexican border	57
North Pacific Ocean near Alaska, and along Alaska coastline, including the Bering Sea and the Gulf of Alaska	58
Central Pacific Ocean, including Hawaiian waters	59
South Central Pacific Ocean, including American Samoa waters	61
Western Pacific Ocean, including Mariana Island waters	65
Western North Atlantic Ocean, and along U.S. East Coast, from Canadian border south to Currituck Beach Light, N.C	73
Western North Atlantic Ocean, and along U.S. East Coast, south of Currituck Beach Light, N.C., following the coastline into Gulf of Mexico to Bonita Beach, FL., including the Caribbean	75
Gulf of Mexico, and along the U.S. Gulf Coast from the Mexican border to Bonita Beach, FL	77
Lake Superior	91
Lake Michigan	92
Lake Huron	93
Lake St. Clair	94
Lake Erie	96
Lake Ontario	97

	FIPS#
St. Lawrence River above St. Regis	98

[1] Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their existing EAS equipment to add these marine area location codes on a voluntary basis until the equipment is replaced. All models of EAS equipment manufactured after August 1, 2003, must be capable of receiving and transmitting these marine area location codes. EAS Participants that install or replace their EAS equipment after February 1, 2004, must install equipment that is capable of receiving and transmitting these location codes.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 55999, Nov. 6, 1995; 61 FR 54952, Oct. 23, 1996; 63 FR 29663, June 1, 1998; 67 FR 18508, Apr. 16, 2002; 67 FR 77174, Dec. 17, 2002; 69 FR 72031, Dec. 10, 2004; 70 FR 71033, Nov. 25, 2005]

§ 11.32 EAS Encoder.

(a) EAS Encoders must at a minimum be capable of encoding the EAS protocol described in §11.31 and providing the EAS code transmission requirements described in §11.51. EAS encoders must additionally provide the following minimum specifications:

(1) *Encoder programming.* Access to encoder programming shall be protected by a lock or other security measures and be configured so that authorized personnel can readily select and program the EAS Encoder with Originator, Event and Location codes for either manual or automatic operation.

(2) *Inputs.* The encoder shall have two inputs, one for audio messages and one for data messages (RS–232C with standard protocol and 1200 baud rate).

(3) *Outputs.* The encoder shall have two outputs, one audio port and one data port (RS–232C with standard protocol and 1200 baud rate).

(4) *Calibration.* EAS Encoders must provide a means to comply with the modulation levels required in §11.51(f).

(5) Day-Hour-Minute and Identification Stamps. The encoder shall affix the JJJHHMM and LLLLLLLL codes automatically to all initial messages.

(6) *Program Data Retention.* Program data and codes shall be retained even with the power removed.

(7) *Indicator.* An aural or visible means that it activated when the Preamble is sent and deactivated at the End of Message code.

(8) *Spurious Response.* All frequency components outside 200 to 4000 Hz shall be attenuated by 40 dB or more with respect to the output levels of the mark or space frequencies.

(9) *Attention Signal generator.* The encoder must provide an attention signal that complies with the following:

(i) *Tone Frequencies.* The audio tones shall have fundamental frequencies of 853 and 960 Hz and not vary over ±0.5 Hz.

(ii) *Harmonic Distortion.* The total harmonic distortion of each of the audio tones may not exceed 5% at the encoder output terminals.

(iii) *Minimum Level of Output.* The encoder shall have an output level capability of at least +8 dBm into a 600 Ohm load impedance at each audio tone. A means shall be provided to permit individual activation of the two tones for calibration of associated systems.

(iv) *Time Period for Transmission of Tones.* The encoder shall have timing circuitry that automatically generates the two tones simultaneously for a time period of not less than 8 nor longer than 25 seconds. NOTE: Prior to July 1, 1995, the Attention Signal must be at least 20 and not more than 25 seconds.

(v) *Inadvertent activation.* The switch used for initiating the automatic generation of the simultaneous tones shall be protected to prevent accidental operation.

(vi) *Indicator Display.* The encoder shall be provided with a visual and/or aural indicator which clearly shows that the Attention Signal is activated.

(b) *Operating Temperature and Humidity.* Encoders shall have the ability to operate with the above specifications within an ambient temperature range of 0 to +50 degrees C and a range of relative humidity of up to 95%.

(c) *Primary Supply Voltage Variation.* Encoders shall be capable of complying with the requirements of this section during a variation in primary supply voltage of 85 percent to 115 percent of its rated value.

(d) *Testing Encoder Units.* Encoders not covered by §11.34(e) of this part shall be tested in a 10 V/m minimum RF field at an AM broadcast frequency and a 0.5 V/m minimum RF field at an FM or TV broadcast frequency to simulate actual working conditions.

§ 11.33 EAS Decoder.

(a) An EAS Decoder must at a minimum be capable of decoding the EAS protocol described in § 11.31, provide the EAS monitoring functions described in § 11.52, and the following minimum specifications:

(1) *Inputs*. Decoders must have the capability to receive at least 2 audio inputs from EAS monitoring assignments, and one data input (RS–232C with standard protocol and 1200 baud rate). The data input may be used to monitor other communications modes such as Radio Broadcast Data System (RBDS), NWR, satellite, public switched telephone network, or any other source that uses the EAS protocol.

(2) *Valid codes*. There must be a means to determine if valid EAS header codes are received and to determine if preselected header codes are received.

(3) *Storage*. Decoders must provide the means to:

(i) Record and store, either internally or externally, at least two minutes of audio or text messages. A decoder manufactured without an internal means to record and store audio or text must be equipped with a means (such as an audio or digital jack connection) to couple to an external recording and storing device.

(ii) Store at least ten preselected event and originator header codes, in addition to the seven mandatory event/originator codes for tests and national activations, and store any preselected location codes for comparison with incoming header codes. A non-preselected header code that is manually transmitted must be stored for comparison with later incoming header codes. The header codes of the last ten received valid messages which still have valid time periods must be stored for comparison with the incoming valid header codes for later messages. These last received header codes will be deleted from storage as their valid time periods expire.

(4) *Display and logging*. A visual message shall be developed from any valid header codes for tests and national activations and any preselected header codes received. The message shall include the Originator, Event, Location, the valid time period of the message and the local time the message was transmitted. The message shall be in the primary language of the EAS Participant and be fully displayed on the decoder and readable in normal light and darkness. All existing and new models of EAS decoders manufactured after August 1, 2003 must provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events. Effective May 16, 2002, analog radio and television broadcast stations, analog cable systems and wireless cable systems may upgrade their decoders on an optional basis to include a selective display and logging capability for EAS messages containing header codes for state and local events. EAS Participants that install or replace their decoders after February 1, 2004 must install decoders that provide a means to permit the selective display and logging of EAS messages containing header codes for state and local EAS events.

(5) *Indicators*. EAS decoders must have a distinct and separate aural or visible means to indicate when any of the following conditions occurs:

(i) Any valid EAS header codes are received as specified in § 11.33(a)(10).

(ii) Preprogrammed header codes, such as those selected in accordance with § 11.52(d)(2) are received.

(iii) A signal is present at each audio input that is specified in § 11.33(a)(1).

(6) *Program Data Retention*. The program data must be retained even with power removed.

(7) *Outputs*. Decoders shall have the following outputs: a data port or ports (RS–232C with standard protocol and 1200 baud rate) where received valid EAS header codes and received preselected header codes are available; one audio port that is capable of monitoring each decoder audio input; and, an internal speaker to enable personnel to hear audio from each input.

(8) *Decoder Programming*. Access to decoder programming shall be protected by a lock or other security measures and be configured so that authorized personnel can readily select and program the EAS Decoder with

preselected Originator, Event and Location codes for either manual or automatic operation.

(9) *Reset*. There shall be a method to automatically or manually reset the decoder to the normal monitoring condition. Operators shall be able to select a time interval, not less than two minutes, in which the decoder would automatically reset if it received an EAS header code but not an end-of-message (EOM) code. Messages received with the EAN Event codes shall disable the reset function so that lengthy audio messages can be handled. The last message received with valid header codes shall be displayed as required by paragraph (a)(4) of this section before the decoder is reset.

(10) *Message Validity*. An EAS Decoder must provide error detection and validation of the header codes of each message to ascertain if the message is valid. Header code comparisons may be accomplished through the use of a bit-by-bit compare or any other error detection and validation protocol. A header code must only be considered valid when two of the three headers match exactly. Duplicate messages must not be relayed automatically.

(11) A header code with the EAN Event code specified in §11.31(c) that is received through any of the audio inputs must override all other messages.

(b) *Attention Signal*. EAS Decoders shall have detection and activation circuitry that will demute a receiver upon detection of the two audio tones of 853 Hz and 960 Hz. To prevent false responses, decoders designed to use the two tones for receiver demuting shall comply with the following:

(1) *Time Delay*. A minimum time delay of 8 but not more than 16 seconds of tone reception shall be incorporated into the demuting or activation process to insure that the tones will be audible for a period of at least 4 seconds. After July 1, 1995, the time delay shall be 3–4 seconds.

(2) *Operation Bandwidth*. The decoder circuitry shall not respond to tones which vary more than ±5 Hz from each of the frequencies, 853 Hz and 960 Hz.

(3) *Reset Ability*. The decoder shall have a means to manually or automatically reset the associated broadcast receiver to a muted state.

(c) Decoders shall be capable of operation within the tolerances specified in this section as well as those in §11.32 (b), (c) and (d).

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 55999, Nov. 6, 1995; 67 FR 18510, Apr. 16, 2002; 70 FR 71033, Nov. 25, 2005]

§11.34 Acceptability of the equipment.

(a) An EAS Encoder used for generating the EAS codes and the Attention Signal must be Certified in accordance with the procedures in part 2, subpart J, of this chapter. The data and information submitted must show the capability of the equipment to meet the requirements of this part as well as the requirements contained in part 15 of this chapter for digital devices.

(b) Decoders used for the detection of the EAS codes and receiving the Attention Signal must be Certified in accordance with the procedures in part 2, subpart J, of this chapter. The data and information submitted must show the capability of the equipment to meet the requirements of this part as well as the requirements contained in part 15 of this chapter for digital devices.

(c) The functions of the EAS decoder, Attention Signal generator and receiver, and the EAS encoder specified in §§11.31, 11.32 and 11.33 may be combined and Certified as a single unit provided that the unit complies with all specifications in this rule section.

(d) Manufacturers must include instructions and information on how to install, operate and program an EAS Encoder, EAS Decoder, or combined unit and a list of all State and county FIPS numbers with each unit sold or marketed in the U.S.

(e) Waiver requests of the Certification requirements for EAS Encoders or EAS Decoders which are constructed for use by an EAS Participant, but are not offered for sale will be considered on an individual basis in accordance with part 1, subpart G, of this chapter.

(f) Modifications to existing authorized EAS decoders, encoders or combined units necessary to implement the new EAS codes specified in §11.31 and to implement the selective displaying and logging feature specified in §11.33(a)(4) will be considered Class I permissive changes that do not require a new application for and grant of

equipment certification under part 2, subpart J of this chapter.

(g) All existing and new models of EAS encoders, decoders and combined units manufactured after August 1, 2003 must be capable of generating and detecting the new EAS codes specified in §11.31 in order to be certified under part 2, subpart J of this chapter. All existing and new models of EAS decoders and combined units manufactured after August 1, 2003 must have the selective displaying and logging capability specified in §11.33(a)(4) in order to be certified under part 2, subpart J of this chapter.

[59 FR 67092, Dec. 28, 1994, as amended at 60 FR 56000, Nov. 6, 1995; 67 FR 18510, Apr. 16, 2002; 70 FR 71034, Nov. 25, 2005]

§11.35 Equipment operational readiness.

(a) EAS Participants are responsible for ensuring that EAS Encoders, EAS Decoders and Attention Signal generating and receiving equipment used as part of the EAS are installed so that the monitoring and transmitting functions are available during the times the stations and systems are in operation. Additionally, EAS Participants must determine the cause of any failure to receive the required tests or activations specified in §11.61(a)(1) and (a)(2). Appropriate entries indicating reasons why any tests were not received must be made in the broadcast station log as specified in §§73.1820 and 73.1840 of this chapter for all broadcast streams and cable system records as specified in §§76.1700, 76.1708, and 76.1711 of this chapter. All other EAS Participants must also keep records indicating reasons why any tests were not received and these records must be retained for two years, maintained at the EAS Participant's headquarters, and made available for public inspection upon reasonable request.

(b) If the EAS Encoder or EAS Decoder becomes defective, the EAS Participant may operate without the defective equipment pending its repair or replacement for 60 days without further FCC authority. Entries shall be made in the broadcast station log, cable system records, and records of other EAS Participants, as specified in paragraph (a) of this rule, showing the date and time the equipment was removed and restored to service. For personnel training purposes, the required monthly test script must still be transmitted even though the equipment for generating the EAS message codes, Attention Signal and EOM code is not functioning.

(c) If repair or replacement of defective equipment is not completed within 60 days, an informal request shall be submitted to the District Director of the FCC field office serving the area in which the EAS Participant is located, or in the case of DBS and SDARS providers to the District Director of the FCC field office serving the area where their headquarters is located, for additional time to repair the defective equipment. This request must explain what steps have been taken to repair or replace the defective equipment, the alternative procedures being used while the defective equipment is out of service, and when the defective equipment will be repaired or replaced.

[70 FR 71034, Nov. 25, 2005]

Subpart C—Organization

§11.41 Participation in EAS.

(a) All EAS Participants specified in §11.11 are categorized as Participating National (PN) sources unless authorized by the FCC to be Non-Participating (NN) sources.

(b) An EAS Participant may submit a written request to the FCC asking to be an NN source. The FCC may then issue a Non-participating National Authorization letter. NN sources must go off the air during a national EAS activation after transmitting specified information.

(1) An EAS Participant that is an NN source under §11.18(f) that wants to become a PN source in the national level EAS must submit a written request to the FCC.

(2) NN sources may voluntarily participate in the State and Local Area EAS. Participation is at the discretion of EAS Participant management and should comply with State and Local Area EAS Plans.

(c) All sources, including NN, must have immediate access to an EAS Operating Handbook.

[70 FR 71034, Nov. 25, 2005]

§ 11.42 Participation by communications common carriers.

(a) During activation of the National level EAS, communications common carriers which have facilities available in place may, without charge, connect:

(1) An originating source from the nearest service area to a selected Test Center and then to the EAS Participant for the duration of the emergency, provided an Emergency Action Notification is issued by the White House and the originating source has a local channel from the originating point to the nearest service area.

(2) An independent broadcast station to the radio and television broadcast networks and any other EAS Participant provided the station has in service a local channel from the station's studio or transmitter directly to the broadcast source.

(b) Upon receipt of the Emergency Action Termination, the common carriers shall disconnect the originating source and the participating independent stations and restore the networks and other EAS Participants to their original configurations.

(c) During a National level EAS Test, common carriers which have facilities in place may, without charge, connect an originating source from the nearest exchange to a selected Test Center and then to any EAS Participant. Independent stations will not be connected during the test unless authorized by the FCC. Upon test termination, EAS Participants shall be restored to their original configurations.

(d) A common carrier rendering free service shall file with the FCC, on or before July 31st and January 31st of each year, reports covering the six months ending on June 30th and December 31st respectively. These reports shall state what free service was rendered under this rule and the charges in dollars which would have accrued to the carrier for this service if charges had been collected at the published tariff rates if such carriers are required to file tariffs.

[59 FR 67092, Dec. 28, 1994, as amended at 67 FR 18510, Apr. 16, 2002; 70 FR 71034, Nov. 25, 2005]

§ 11.43 National level participation.

Entities that wish to voluntarily participate in the national level EAS may submit a written request to the Chief, Public Safety and Homeland Security Bureau.

[71 FR 69038, Nov. 29, 2006]

§ 11.44 EAS message priorities.

(a) A national activation of the EAS for a Presidential message with the Event code EAN as specified in § 11.31 must take priority over any other message and preempt it if it is in progress.

(b) EAS participants should transmit other EAS messages in the following order: first, Local Area Messages; second, State Messages; and third, National Information Center (NIC) Messages.

(c) Key EAS sources (NP, LP, SP and SR) and Participating National (PN) sources that remain on the air during a National emergency must carry Presidential Messages ''live'' at the time of transmission or immediately upon receipt. Activation of the National level EAS must preempt State and Local Area EAS operation.

(d) During a national emergency, the facilities of all EAS Participants must be reserved exclusively for distribution of Presidential Messages. NIC messages received from national networks which are not broadcast at the time of original transmission must be recorded locally by LP sources for transmission at the earliest opportunity consistent with the message priorities in paragraph (b) of this section.

[59 FR 67092, Dec. 28, 1994, as amended by 70 FR 71034, Nov. 25, 2005]

§ 11.45 Prohibition of false or deceptive EAS transmissions.

No person may transmit or cause to transmit the EAS codes or Attention Signal, or a recording or simulation thereof, in any circumstance other than in an actual National, State or Local Area emergency or authorized

test of the EAS. Broadcast station licensees should also refer to §73.1217 of this chapter.

§11.46 EAS public service announcements.

EAS Participants may use Public Service Announcements or obtain commercial sponsors for announcements, infomercials, or programs explaining the EAS to the public. Such announcements and programs may not be a part of alerts or tests, and may not simulate or attempt to copy alert tones or codes.

[70 FR 71034, Nov. 25, 2005]

§11.47 Optional use of other communications methods and systems.

(a) Analog and digital broadcast stations may additionally transmit EAS messages through other communications means. For example, on a voluntary basis, FM stations may use subcarriers to transmit the EAS codes including 57 kHz using the RBDS standard produced by the National Radio Systems Committee (NRSC) and television stations may use subsidiary communications services.

(b) Other technologies and public service providers, such as low earth orbiting satellites, that wish to participate in the EAS may contact the FCC's Office of Homeland Security, Enforcement Bureau, or their State Emergency Communications Committee for information and guidance.

[70 FR 71034, Nov. 25, 2005]

Subpart D—Emergency Operations

§11.51 EAS code and Attention Signal Transmission requirements.

(a) Analog and digital broadcast stations must transmit, either automatically or manually, national level EAS messages and required tests by sending the EAS header codes, Attention Signal, emergency message and End of Message (EOM) codes using the EAS Protocol. The Attention Signal must precede any emergency audio message. After January 1, 1998, the shortened Attention Signal may only be used as an audio alert signal and the EAS codes will become the minimum signaling requirement for National level messages and tests.

(b) When relaying EAS messages, EAS Participants may transmit only the EAS header codes and the EOM code without the Attention Signal and emergency message for State and local emergencies. Pauses in video programming before EAS message transmission should not cause television receivers to mute EAS audio messages. No Attention Signal is required for EAS messages that do not contain audio programming, such as a Required Weekly Test.

(c) By the effective dates provided in §11.11(a), all analog and digital radio and television stations shall transmit EAS messages in the main audio channel. Effective December 31, 2006, all DAB stations shall also transmit EAS messages on all audio streams. Effective December 31, 2006, all DTV broadcast stations shall also transmit EAS messages on all program streams.

(d) By the effective dates provided in §11.11(a), analog and digital television broadcast stations shall transmit a visual message containing the Originator, Event, Location and the valid time period of an EAS message. If the message is a video crawl, it shall be displayed at the top of the television screen or where it will not interfere with other visual messages.

(e) Analog class D non-commercial educational FM stations as defined in §73.506 of this chapter, digital class D non-commercial educational FM stations, analog Low Power FM (LPFM) stations as defined in §§73.811 and 73.853 of this chapter, digital LPFM stations, analog low power TV (LPTV) stations as defined in §74.701(f) of this chapter, and digital LPTV stations as defined in §74.701(k) of this chapter are not required to have equipment capable of generating the EAS codes and Attention Signal specified in §11.31.

(f) Analog and digital broadcast station equipment generating the EAS codes and the Attention Signal shall modulate a broadcast station transmitter so that the signal broadcast to other EAS Participants alerts them that the EAS is being activated or tested at the National, State or Local Area level. The minimum level of modulation for EAS codes, measured at peak

modulation levels using the internal calibration output required in §11.32(a)(4), shall modulate the transmitter at the maximum possible level, but in no case less than 50% of full channel modulation limits. Measured at peak modulation levels, each of the Attention Signal tones shall be calibrated separately to modulate the transmitter at no less than 40%. These two calibrated modulation levels shall have values that are within 1 dB of each other.

(g) Analog cable systems and digital cable systems with fewer than 5,000 subscribers per headend and wireless cable systems with fewer than 5,000 subscribers shall transmit EAS audio messages in the same order specified in paragraph (a) of this section on at least one channel. The Attention Signal may be produced from a storage device. Additionally, these analog cable systems, digital cable systems, and wireless cable systems:

(1) Must install, operate, and maintain equipment capable of generating the EAS codes. The modulation levels for the EAS codes and Attention Signal for analog cable systems shall comply with the aural signal requirements in §76.605 of this chapter,

(2) Must provide a video interruption and an audio alert message on all channels. The audio alert message must state which channel is carrying the EAS video and audio message,

(3) Shall transmit a visual EAS message on at least one channel. The message shall contain the Originator, Event, Location, and the valid time period of the EAS message. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

(4) May elect not to interrupt EAS messages from broadcast stations based upon a written agreement between all concerned. Further, analog cable systems, digital cable systems, and wireless cable systems may elect not to interrupt the programming of a broadcast station carrying news or weather related emergency information with state and local EAS messages based on a written agreement between all parties.

(5) Wireless cable systems and digital cable systems with a requirement to carry the audio and video EAS message on at least one channel and a requirement to provide video interrupt and an audio alert message on all other channels stating which channel is carrying the audio and video EAS message, may comply by using a means on all programmed channels that automatically tunes the subscriber's set-top box to a pre-designated channel which carries the required audio and video EAS messages.

(h) Analog cable and digital cable systems with 10,000 or more subscribers; analog cable and digital cable systems serving 5,000 or more, but less than 10,000 subscribers per headend; and wireless cable systems with 5,000 or more subscribers shall transmit EAS audio messages in the same order specified in paragraph (a) of this section. The Attention Signal may be produced from a storage device. Additionally, these analog cable systems, digital cable systems, and wireless cable systems:

(1) Must install, operate, and maintain equipment capable of generating the EAS codes. The modulation levels for the EAS codes and Attention Signal for analog cable systems shall comply with the aural signal requirements in §76.605 of this chapter. This will provide sufficient signal levels to operate subscriber television and radio receivers equipped with EAS decoders and to audibly alert subscribers. Wireless cable systems and digital cable systems shall also provide sufficient signal levels to operate subscriber television and radio receivers equipped with EAS decoders and to audibly alert subscribers.

(2) Shall transmit the EAS audio message required in paragraph (a) of this section on all downstream channels.

(3) Shall transmit the EAS visual message on all downstream channels. The visual message shall contain the Originator, Event, Location and the valid time period of the EAS message. These are elements of the EAS header code and are described in §11.31. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it

will not interfere with other visual messages.

(4) May elect not to interrupt EAS messages from broadcast stations based upon a written agreement between all concerned. Further, analog cable systems, digital cable systems, and wireless cable systems may elect not to interrupt the programming of a broadcast station carrying news or weather related emergency information with state and local EAS messages based on a written agreement between all parties.

(5) Wireless cable systems and digital cable systems with a requirement to carry the audio and video EAS message on all downstream channels may comply by using a means on all programmed channels that automatically tunes the subscriber's set-top box to a pre-designated channel which carries the required audio and video EAS messages.

(i) Effective December 31, 2006, SDARS licensees shall transmit national audio EAS messages on all channels in the same order specified in paragraph (a) of this section.

(1) SDARS licensees must install, operate, and maintain equipment capable of generating the EAS codes.

(2) SDARS licensees may determine the distribution methods they will use to comply with this requirement.

(j) Effective May 31, 2007, DBS providers shall transmit national audio and visual EAS messages on all channels in the same order specified in paragraph (a) of this section.

(1) DBS providers must install, operate, and maintain equipment capable of generating the EAS codes.

(2) The visual message shall contain the Originator, Event, Location and the valid time period of the EAS message. These are elements of the EAS header code and are described in §11.31. If the visual message is a video crawl, it shall be displayed at the top of the subscriber's television screen or where it will not interfere with other visual messages.

(3) DBS providers may determine the distribution methods they will use to comply with this requirement. Such methods may include distributing the EAS message on all channels, using a means to automatically tune the subscriber's set-top box to a pre-designated channel which carries the required audio and video EAS messages, and/or passing through the EAS message provided by programmers and/or local channels (where applicable).

(k) If manual interrupt is used as authorized in paragraph (m) of this section, EAS Encoders must be located so that EAS Participant staff, at normal duty locations, can initiate the EAS code and Attention Signal transmission.

(l) EAS Participants that are co-owned and co-located with a combined studio or control facility, (such as an AM and FM licensed to the same entity and at the same location or a cable headend serving more than one system) may provide the EAS transmitting requirements contained in this section for the combined stations or systems with one EAS Encoder. The requirements of §11.32 must be met by the combined facility.

(m) EAS Participants are required to transmit all received EAS messages in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), and Required Monthly Test (RMT), and when the accompanying location codes include their State or State/county. These EAS messages shall be retransmitted unchanged except for the LLLLLLLL-code which identifies the EAS Participant retransmitting the message. See §11.31(c). If an EAS source originates an EAS message with the Event codes in this paragraph, it must include the location codes for the State and counties in its service area. When transmitting the required weekly test, EAS Participants shall use the event code RWT. The location codes are the state and county for the broadcast station city of license or system community or city. Other location codes may be included upon approval of station or system management. EAS messages may be transmitted automatically or manually.

(1) Automatic interrupt of programming and transmission of EAS messages are required when facilities are unattended. Automatic transmissions must include a permanent record that contains at a minimum the following

information: Originator, Event, Location and valid time period of the message. The decoder performs the functions necessary to determine which EAS messages are automatically transmitted by the encoder.

(2) Manual interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN Event code must be transmitted immediately and Monthly EAS test messages within 60 minutes. All actions must be logged and include the minimum information required for EAS video messages.

(n) EAS Participants may employ a minimum delay feature, not to exceed 15 minutes, for automatic interruption of EAS codes. However, this may not be used for the EAN event which must be transmitted immediately. The delay time for an RMT message may not exceed 60 minutes.

(o) Either manual or automatic operation of EAS equipment may be used by EAS Participants that use remote control. If manual operation is used, an EAS decoder must be located at the remote control location and it must directly monitor the signals of the two assigned EAS sources. If direct monitoring of the assigned EAS sources is not possible at the remote location, automatic operation is required. If automatic operation is used, the remote control location may be used to override the transmission of an EAS alert. EAS Participants may change back and forth between automatic and manual operation.

[70 FR 71035, Nov. 25, 2005]

§ 11.52 EAS code and Attention Signal Monitoring requirements.

(a) EAS Participants must be capable of receiving the Attention Signal required by §11.32(a)(9) and emergency messages of other broadcast stations during their hours of operation. EAS Participants must install and operate during their hours of operation, equipment capable of receiving and decoding, either automatically or manually, the EAS header codes, emergency messages and EOM code. EAS Participants must comply with these requirements by the dates set forth in §11.11.

NOTE TO PARAGRAPH (A): The two-tone Attention Signal will not be used to actuate two-tone decoders but will be used as an aural alert signal.

(b) If manual interrupt is used as authorized in §11.51(m)(2), decoders must be located so that operators at their normal duty stations can be alerted immediately when EAS messages are received.

(c) EAS Participants that are co-owned and co-located with a combined studio or control facility (such as an AM and FM licensed to the same entity and at the same location or a cable headend serving more than one system) may comply with the EAS monitoring requirements contained in this section for the combined station or system with one EAS Decoder. The requirements of §11.33 must be met by the combined facility.

(d) EAS Participants must monitor two EAS sources. The monitoring assignments of each broadcast station and cable system and wireless cable system are specified in the State EAS Plan and FCC Mapbook. They are developed in accordance with FCC monitoring priorities.

(1) If the required EAS sources cannot be received, alternate arrangements or a waiver may be obtained by written request to the FCC's EAS office. In an emergency, a waiver may be issued over the telephone with a follow up letter to confirm temporary or permanent reassignment.

(2) The management of EAS Participants shall determine which header codes will automatically interrupt their programming for State and Local Area emergency situations affecting their audiences.

(e) EAS Participants are required to interrupt normal programming either automatically or manually when they receive an EAS message in which the header code contains the Event codes for Emergency Action Notification (EAN), Emergency Action Termination (EAT), and Required Monthly Test (RMT) for their State or State/county location.

(1) *Automatic* interrupt of programming is required when facilities are unattended. Automatic operation must provide a permanent record of the EAS message that contains at a minimum the following information: Originator,

Event, Location and valid time period of the message.

(2) *Manual* interrupt of programming and transmission of EAS messages may be used. EAS messages with the EAN Event code must be transmitted immediately and Monthly EAS test messages within 60 minutes. All actions must be logged and recorded as specified in §§ 11.35(a) and 11.54(b)(13). Decoders must be programmed for the EAN and EAT Event header codes for National level emergencies and the RMT and RWT Event header codes for required monthly and weekly tests, with the appropriate accompanying State and State/county location codes.

[70 FR 71036, Nov. 25, 2005]

§ 11.53 Dissemination of Emergency Action Notification.

Initiation of the EAN by any one of the following sources is sufficient to begin the emergency actions in § 11.54.

(a) *National Level.* The EAN is issued by the White House. The EAN message is sent from a government origination point to broadcast stations and other entities participating in the PEP system. It is then disseminated via EAS Participants.

(1) Radio and television broadcast stations.

(2) Cable systems and wireless cable systems.

(3) Other entities voluntarily participating in EAS.

(b) *State level and Local Area levels.* EAN dissemination arrangements at these levels originate from State and local governments in accordance with State and Local Area plans.

(c) Analog and digital broadcast stations must, prior to commencing routine operation or originating any emissions under program test, equipment test, experimental, or other authorizations, determine whether the EAS has been activated by monitoring the assigned EAS sources as specified in their State or Local plan.

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29666, June 1, 1998; 65 FR 7640, Feb. 15, 2000; 65 FR 30001, May 10, 2000; 67 FR 18510, Apr. 16, 2002; 70 FR 71037, Nov. 25, 2005]

§ 11.54 EAS operation during a National Level emergency.

(a) The EAS Operating Handbook summarizes the procedures to be followed upon receipt of a National level EAN or EAT Message.

(b) Immediately upon receipt of an EAN message, EAS Participants must:

(1) Monitor the two EAS sources assigned in the State or Local Area plan or FCC Mapbook for any further instructions. SDARS licensees and DBS providers may choose their two EAS sources, one of which must be a PEP station.

(2) Discontinue normal programming and follow the transmission procedures in the appropriate section of the EAS Operating Handbook. Announcements may be made in the same language as the primary language of the EAS Participant.

(i) Key EAS sources (National Primary (NP), Local Primary (LP), State Primary (SP), State Relay (SR) and Participating National (PN) sources) follow the transmission procedures and make the announcements in the National Level Instructions of the EAS Operating Handbook.

(ii) Non-participating National (NN) sources follow the transmission procedures and make the sign-off announcement in the EAS Operating Handbook's National Level Instructions section for NN sources. After the sign-off announcement, NN sources are required to remove their carriers or services from the air and monitor for the Emergency Action Termination message. NN sources using automatic interrupt under § 11.51(m)(1), must transmit the header codes, Attention Signal, sign-off announcement and EOM code after receiving the appropriate EAS header codes for a national emergency.

(3) After completing the above transmission procedures, key EAS and Participating National sources must transmit a common emergency message until receipt of the Emergency Action Termination Message. Message priorities are specified in § 11.44. If LP or SR sources of a Local Area cannot provide an emergency message feed, any source in the Local Area may elect to provide a message feed. This should be done in an organized manner as designated in State and Local Area EAS Plans.

(4) The Standby Script shall be used until emergency messages are available. The text of the Standby Script is in the EAS Operating Handbook's section for Participating sources.

(5) Analog and digital TV broadcast stations shall display an appropriate EAS slide and then transmit all EAS announcements visually and aurally as specified in §§11.51(a) through (e) and 73.1250(h) of this chapter.

(6) Analog cable systems, digital cable systems, and wireless cable systems shall transmit all EAS announcements visually and aurally as specified in §11.51(g) and (h).

(7) DBS providers shall transmit all EAS announcements visually and aurally as specified in §11.51(j).

(8) Announcements may be made in the same language as the primary language of the EAS participant.

(9) Analog and digital broadcast stations may transmit their call letters and analog cable systems, digital cable systems and wireless cable systems may transmit the names of the communities they serve during an EAS activation. State and Local Area identifications must be given as provided in State and Local Area EAS plans.

(10) All analog and digital broadcast stations and analog cable systems, digital cable systems and wireless cable systems operating and identified with a particular EAS Local Area must transmit a common national emergency message until receipt of the Emergency Action Termination.

(11) Analog and digital broadcast stations, except those holding an EAS Non-participating National Authorization letter, are exempt from complying with §§73.62 and 73.1560 of this chapter (operating power maintenance) while operating under this part.

(12) National Primary (NP) sources must operate under the procedures in the National Control Point Procedures.

(13) The time of receipt of the EAN and Emergency Action Termination messages shall be entered by analog and digital broadcast stations in their logs (as specified in §§73.1820 and 73.1840 of this chapter), by analog and digital cable systems in their records (as specified in §76.1711 of this chapter), by subject wireless cable systems in their records (as specified in §21.304 of this chapter), and by all other EAS Participants in their records as specified in §11.35(a).

(c) Upon receipt of an Emergency Action Termination Message, EAS Participants must follow the termination procedures in the EAS Operating Handbook.

(d) EAS Participants originating emergency communications under this section shall be considered to have conferred rebroadcast authority, as required by section 325(a) of the Communications Act of 1934, 47 U.S.C. 325(a), to other EAS Participants.

(e) During a national level EAS emergency, EAS Participants may transmit in lieu of the EAS audio feed an audio feed of the President's voice message from an alternative source, such as a broadcast network audio feed.

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29666, June 1, 1998; 63 FR 39035, July 21, 1998; 65 FR 21658, Apr. 24, 2000; 65 FR 53614, Sept. 5, 2000; 67 FR 18511, Apr. 16, 2002; 70 FR 71037, Nov. 25, 2005]

§11.55 EAS operation during a State or Local Area emergency.

(a) The EAS may be activated at the State and Local Area levels by EAS Participants at their discretion for day-to-day emergency situations posing a threat to life and property. Examples of natural emergencies which may warrant activation are: Tornadoes, floods, hurricanes, earthquakes, heavy snows, icing conditions, widespread fires, etc. Man-made emergencies may include: toxic gas leaks or liquid spills, widespread power failures, industrial explosions, and civil disorders.

(1) DBS providers shall pass through all EAS messages aired on local television broadcast stations carried by DBS providers under the Commission's broadcast signal carriage rules to subscribers receiving those channels.

(2) SDARS licensees and DBS providers may participate in EAS at the state and local level and make their systems capable of receiving and transmitting state and local level EAS messages on all channels. If an SDARS licensee or DBS provider is not capable of receiving and transmitting state and local EAS message on all channels, it

must inform its subscribers, on its website and in writing on an annual basis, of which channels are and are not capable of supplying state and local messages.

(b) EAS operations must be conducted as specified in State and Local Area EAS Plans. The plans must list all authorized entities participating in the State or Local Area EAS.

(c) Immediately upon receipt of a State or Local Area EAS message, EAS Participants participating in the State or Local Area EAS must do the following:

(1) State Relay (SR) sources monitor the State Relay Network or follow the State EAS plan for instructions from the State Primary (SP) source.

(2) Local Primary (LP) sources monitor the Local Area SR sources or follow the State EAS plan for instructions.

(3) Participating National (PN) and Non-participating National (NN) sources monitor the Local Area LP sources for instructions.

(4) EAS Participants participating in the State or Local Area EAS must discontinue normal programming and follow the procedures in the State and Local Area plans. Analog and digital television broadcast stations must comply with §11.54(b)(5); analog cable systems, digital cable systems, and wireless cable systems must comply with §11.54(b)(6); and DBS providers must comply with §11.54(b)(7). EAS Participants providing foreign language programming should comply with §11.54(b)(8).

(5) Upon completion of the State or Local Area EAS transmission procedures, resume normal programming until receipt of the cue from the SR or LP sources in your Local Area. At that time begin transmitting the common emergency message received from the above sources.

(6) Resume normal operations upon conclusion of the message.

(7) The times of the above EAS actions must be entered in the EAS Participants' records as specified in §§11.35(a) and 11.54(b)(13).

(8) Use of the EAS codes or Attention Signal automatically grants rebroadcast authority as specified in §11.54(d).

[59 FR 67092, Dec. 28, 1994, as amended at 63 FR 29666, June 1, 1998; 65 FR 21658, Apr. 24, 2000; 67 FR 18511, Apr. 16, 2002; 70 FR 71037, Nov. 25, 2005]

Subpart E—Tests

§ 11.61 Tests of EAS procedures.

(a) EAS Participants shall conduct tests at regular intervals, as specified in paragraphs (a)(1) and (a)(2) of this section. Additional tests may be performed anytime. EAS activations and special tests may be performed in lieu of required tests as specified in paragraph (a)(4) of this section. All tests will conform with the procedures in the EAS Operating Handbook.

(1) Required Monthly Tests of the EAS header codes, Attention Signal, Test Script and EOM code.

(i) Tests in odd numbered months shall occur between 8:30 a.m. and local sunset. Tests in even numbered months shall occur between local sunset and 8:30 a.m. They will originate from Local or State Primary sources. The time and script content will be developed by State Emergency Communications Committees in cooperation with affected EAS Participants. Script content may be in the primary language of the EAS Participant. These monthly tests must be transmitted within 60 minutes of receipt by EAS Participants in an EAS Local Area or State. Analog and digital class D non-commercial educational FM and analog and digital LPTV stations are required to transmit only the test script.

(ii) Effective May 31, 2007, DBS providers must comply with this section by monitoring a state or local primary source to participate in testing. Tests should be performed on 10% of all channels monthly (excluding local-into-local channels for which the monthly transmission tests are passed through by the DBS provider), with channels tested varying from month to month, so that over the course of a given year, 100% of all channels are tested.

(2) Required Weekly Tests:

(i) EAS Header Codes and EOM Codes:

(A) Analog and digital AM, FM, and TV broadcast stations must conduct tests of the EAS header and EOM codes at least once a week at random days and times. Effective December 31, 2006, DAB stations must conduct these tests on all audio streams. Effective December 31, 2006, DTV stations must conduct these tests on all program streams.

(B) Analog cable systems and digital cable systems with 5,000 or more subscribers per headend and wireless cable systems with 5,000 or more subscribers must conduct tests of the EAS Header and EOM Codes at least once a week at random days and times on all programmed channels.

(C) Analog cable systems and digital cable systems serving fewer than 5,000 subscribers per headend and wireless cable systems with fewer than 5,000 subscribers must conduct tests of the EAS Header and EOM Codes at least once a week at random days and times on at least one programmed channel.

(D) SDARS providers must conduct tests of the EAS Header and EOM codes at least once a week at random days and times on all channels.

(ii) DBS providers, analog and digital class D non-commercial educational FM stations, and analog and digital LPTV stations are not required to transmit this test but must log receipt, as specified in §§11.35(a) and 11.54(b)(13).

(iii) The EAS weekly test is not required during the week that a monthly test is conducted.

(iv) EAS Participants are not required to transmit a video message when transmitting the required weekly test.

(3) *Periodic National Tests.* National Primary (NP) sources shall participate in tests as appropriate. The FCC may request a report of these tests.

(4) *EAS activations and special tests.* The EAS may be activated for emergencies or special tests at the State or Local Area level by an EAS Participant instead of the monthly or weekly tests required by this section. To substitute for a monthly test, activation must include transmission of the EAS header codes, Attention Signal, emergency message and EOM code and comply with the visual message requirements in §11.51. To substitute for the weekly test of the EAS header codes and EOM codes in paragraph (a)(2)(i) of this section, activation must include transmission of the EAS header and EOM codes. Analog and digital television broadcast stations, analog cable systems, digital cable systems, wireless cable systems, and DBS providers shall comply with the aural and visual message requirements in §11.51. Special EAS tests at the State and Local Area levels may be conducted on daily basis following procedures in State and Local Area EAS plans.

(b) Entries shall be made in EAS Participant records, as specified in §§11.35(a) and 11.54(b)(13).

[70 FR 71038, Nov. 25, 2005]

PART 12—REDUNDANCY OF COMMUNICATIONS SYSTEMS

Sec.

AUTHORITY: Sections 1, 4(i), 4(j), 4(o), 5(c), 218, 219, 301, 303(g), 303(j), 303(r), 332, 403, 621(b)(3), and 621(d) of the Communications Act of 1934, as amended, 47 U.S.C. 151, 154(i), 154(j), 154(o), 155(c), 218, 219, 301, 303(g), 303(j), 303(r), 332, 403, 621(b)(3), and 621(d), unless otherwise noted.

SOURCE: 72 FR 37673, July 11, 2007, unless otherwise noted.

§12.1 Purpose.

The rules in this part include requirements that will help ensure the resiliency, redundancy and reliability of communications systems, particularly 911 and E911 networks and/or systems.

§12.2 Backup power.

Local exchange carriers (LECs), including incumbent LECS (ILECs) and competitive LECs (CLECs), and commercial mobile radio service (CMRS) providers must have an emergency backup power source for all assets that are normally powered from local AC commercial power, including those inside central offices, cell sites, remote switches and digital loop carrier system remote terminals. LECs and CMRS providers should maintain emergency back-up power for a minimum of 24 hours for assets inside central offices and eight hours for cell sites, remote